

places in England ; and Mr. Thompson, Belfast, has found it all around the coast of Ireland ; but the only habitat in Scotland mentioned by Prof. Edward Forbes is the gneiss shore of Ross-shire.

I may mention, that about five years ago, I found near the same locality at Clackland Point, a little starfish which was quite new to me, and for which afterwards I repeatedly looked in vain. I found two of them alive, adhering to *Halidrys siliquosa*, but they were lost by being deposited in a vasculum which had been so injured that it could not be kept closely shut. This *starlet* was not more than $\frac{5}{8}$ ths of an inch in length, and little more than $\frac{3}{8}$ ths in breadth ; and as it had only four rays, and as the angles were not produced, it had quite the appearance of a miniature oblong shield. It was ash-coloured above. It is possible that it might be an abnormal variety of *Asterina gibbosa*, but this must remain *in dubia* till it is found by some person with a securer vasculum.

XLVIII.—Notes on the Synonymy of the Genus Apion, with Descriptions of Six new Species, &c. By JOHN WALTON, Esq., F.L.S.

[Continued from vol. xiii. p. 457.]

37. *Apion striatum*, Marsh., Kirb., Steph. Manual.

— *Pisi*, Germ., Steph.

— *atratum*, Germ., Steph., Schönh.

THIS species may be distinguished from the following by having the head *rugose-punctate* between the eyes, and the vertex with a *smooth shining transverse band* adjoining the thorax ; this is a constant character : the thorax has a distinct *dorsal channel*. The majority have the elytra *obcuneiform* and very convex ; these may be regarded as of the normal form ; but many individuals have a tendency to become much shorter, and these varieties have the elytra *globose-ovate* and *subglobose* ; others are narrowed posteriorly and less convex, having the forms *oblong-ovate* and *oblong-oval* ; hence the difficulty of identifying species from descriptions. Kirby and Stephens describe this species with the elytra *globose* ; Germar and Schönherr as *obcuneiform* : when the extreme forms are contrasted by placing them in juxtaposition, it is difficult to believe that they belong to the same species ; yet in a long series they are closely linked together by a regular transition from one form to another, and by the natural character of the sculpture. Small specimens are sometimes found less than half the magnitude of others, with intermediate sizes. The characters which commonly distinguish the sexes are not very obvious in this and

the following species, and without some practical experience are rather difficult to determine.

I received four insects from Germar with the name *Ap. atratum*; these are beyond all doubt the same species as *Ap. striatum* of Marsham and Kirby.

Very common almost everywhere on the furze (*Ulex europæus*) from February to November.

38. *A. immune*, Kirb., Steph., Schönh.

— *Betula* (Chevr. in Litt.), Schönh.

This species differs from the preceding in having the head *distinctly striated* between the eyes, the vertex *very coarsely punctured* adjacent to the thorax, the corresponding space in *Ap. striatum* being *smooth* and *shining*; the thorax with a large puncture near the base, before the scutellum, sometimes obsolete or wanting. The thorax has been described as somewhat globose and punctulated, whereas it is narrow and subcylindrical, laterally a little dilated at the middle, very coarsely and thickly punctured; the elytra, at the sides, posteriorly much enlarged and rounded, with the apex obtusely rounded, above very convex, and remarkably gibbous behind the middle. It is a smaller species than the foregoing, and also variable in form and size.

M. Chevrolat forwarded to me two insects under the name of *Ap. Betula* of Schönherr, which are very evidently small varieties of this species.

In my former notes on the species of this genus, I have erroneously referred the present insect to the preceding, as its male; the possession of an extensive series recently collected in the south of England has enabled me to correct this error, and to point out the specific distinctions of both species.

This insect appears to be confined to the south of England and is rather local; I found it plentifully on the broom (*Spartium Scoparium*) in Charlton sand-pits and in other localities in June and September.

39. *A. Sorbi*, Herbst, Kirb., Gyll., Germ., Steph., Schönh.

Curc. viridescens, Marsh.

A. carbonarium, Germ. (♂), Steph. Ill.

The male of this species is of smaller size than the female, the eyes are more prominent, the rostrum shorter and stouter, and the elytra black.

Gyllenhal first identified the male of this insect, which he communicated to Kirby; afterwards both authors described the female, and characterized the male; since which (1817) Germar described and figured an insect under the name of *Ap. carbonarium*, which he subsequently recorded as the male of *Ap. Sorbi**. Stephens in his 'Illustrations' described an insect under the name of *Ap.*

* Germ. Mag. iii, App. p. 39.

carbonarium of Germar, which he has sunk in his 'Manual' as a variety of *Ap. Sorbi*, but with a note of interrogation; and the error has not been corrected, as the name still stands in Curtis's 'Guide' and in Stephens's 'Nomenclature.'

Gyllenhal has erroneously referred the male to *Curc. aterrimus* of Linnæus: see notes on *Ap. marchicum*.

This fine species appears to be rare in the south of England. Mr. S. Stevens captured a few specimens of both sexes at Buryhill near Arundel; Mr. Wollaston found the female abundantly amongst moss and dead leaves near Cambridge, and what is remarkable, without a single male occurring; I have also met with the female very plentifully under the same circumstances in woods and hedges near Knaresborough in Yorkshire in June, and both sexes in company in the same neighbourhood on the black thorn (*Prunus spinosa*) in September. According to my experience, the males of *Ap. subulatum* are very rarely found with the female, and when they occur together, the number of females is much greater in proportion than the males. It is difficult to assign a cause for these anomalies.

40. *A. Ervi*, Kirb., Gyll., Germ., Steph., Schönh.

— (♂) *Lathyri*, Kirb., Steph.

Mr. Kirby confounded the sexes of this insect, and recorded *Ap. Lathyri* as a distinct species; Gyllenhal afterwards defined the sexual characters, and cited *Ap. Lathyri* of Kirby as the male of *Ap. Ervi*; British writers have subsequently, upon the authority of the latter author, upheld the name; I have however published* evidence of their identity which I need not repeat here.

This is a common species, widely distributed, and occurs almost everywhere on the *Lathyrus pratensis* from June to October.

41. *A. punctigerum*, Germ., Gyll., Steph., Schönh.

— *sulcifrons*, Kirb., Steph., not Herbst.

— *punctiger*, Payk., Gyll. vol. iii.

I have seen a foreign specimen of *Ap. sulcifrons* of Herbst in the possession of Mr. Waterhouse, which is undoubtedly distinct from the present species, and has not yet been discovered in Britain.

I found this insect abundantly in the north, and also near Dover on *Vicia sepium*, in company with *Bruchus seminarius*, in June last.

42. *A. Spencii*, Kirb., Germ., Steph., Schönh.

— (var. β, γ.) *foveolatum*, Kirb., Steph.

— *intrusum*, Gyll., Steph.

— *columbinum*, Steph., not Germ.

The description of *Ap. foveolatum* by Kirby is taken from a

* Ent. Mag. v. p. 13.

Swedish insect sent to him by Gyllenhal, which is now in the possession of the Entomological Society: no doubt can exist as to the identity of this insect; it is pinned with a long fine pin and labelled with Mr. Kirby's number 27; subsequently Gyllenhal described the same species; and it is very remarkable, that the descriptions of the sculpture by these celebrated entomologists are very discrepant. The head between the eyes is described by Kirby as having an *impressed fovea*, by Gyllenhal as *flat, not impressed*; the thorax is defined by the former as *deeply punctured*, by the latter as *obsoletely punctate*. I have minutely examined the Swedish insect above-named; it has the head, between the eyes (when viewed in front), evidently *impressed*, and the thorax *distinctly* punctured. It has a very great resemblance in all its essential characters to *Ap. Spencii*, and as the latter species is extremely variable, I have hitherto regarded it as a male variety, but it appears to have the rostrum a little shorter and rather less bent; the antennæ with their articulations also appear to be rather shorter and a little stouter; these differences have caused me to hesitate in giving a decided opinion. The British insect variety β , cited by Kirby under the name of *Ap. foveolatum* with a note of interrogation, "an idem?" is beyond all doubt a male of *Ap. Spencii*; and variety γ is decidedly a female variety of the same species. Gyllenhal has referred the first (β) to his *Ap. intrusum*, and I have no doubt from his description it is synonymous with *Ap. Spencii*. Germar has cited both the above varieties of Kirby (β , γ) under his *Ap. columbinum*, but with a note of interrogation. I possess a foreign example of the latter species from Germar; it has the habit of a female of *Ap. Spencii* with a narrow head, but appears to be distinct from that species; it differs in having the head longer and constricted behind the eyes, with a much deeper concavity between them, the concavity profoundly sulcate; the thorax somewhat cylindrical, deeply rugose-punctate; the elytra longer, less convex, and of an oblong-oval form: I have never seen a British specimen like it.

The typical examples of *Ap. Spencii* (27 ♀ ♂), now in the Kirbian collection, have the head with a distinct cavity or fovea between the eyes; it is very extraordinary that Mr. Kirby in his description should have omitted to notice this important character. The male has the rostrum rather shorter than that of the female, filiform, and covered with hairs to the apex; in the latter sex the rostrum is rather attenuated before the antennæ, and glabrous. Varieties of the female occur with very narrow heads; and the cavity between the eyes in both sexes is more or less deep; the foveæ on each side of the dorsal channel towards the base are sometimes obsolete or entirely wanting. When a long series of this species is closely examined, the characters will be found to be extremely variable.

I have found this insect very abundant near Low Harrowgate, Scarborough, and at other places in Yorkshire, invariably on *Vicia Cracca* in the month of August; and also at Lyndhurst. Taken by Mr. S. Stevens near Edgeware, and at Hampstead in July.

43. *A. virens*, Herbst, Kirb., Germ., Gyll., Steph., Schönh.
 — *marchicum*, Kirb. (♂), Germ., Steph.
 — *æneocephalum*, Gyll. vol. iii.

Mr. Kirby suspected that *Ap. marchicum* was but a sexual variety of *Ap. virens*; the male has the rostrum distinctly shorter and stouter, with the antennæ inserted at the middle; I have no doubt whatever that the former is the male of the latter.

It is rather a common species, and found in the north and south of England on hedge-banks and amongst grass in the spring and autumn.

44. *A. Astragali*, Payk., Kirb., Gyll., Germ., Steph., Schönh.

I am indebted to R. N. Greville, Esq., for specimens of this beautiful insect; they were taken by him near Northampton in June; it inhabits *Astragalus glycyphyllus*, and is found in June and July. I have frequently examined that plant in the north and south of England, but I never met with the insect; it appears to be extremely local and periodical in its appearance: Mr. Kirby sought for it year after year, *Astragalus glycyphyllus* being abundant near his residence, but never found it more than once.

45. *A. Loti*, Kirb., Germ., Steph.
 — *angustatum*, Kirb., Gyll., Schönh.
 — *modestum*, Germ.
 — (var.) *glabratum* (Spence MSS.), Germ., Steph.
 — (var.) *civicum*, Mus. Steph.

Ap. angustatum was described by Kirby from a Swedish insect which is certainly a narrow female variety of *Ap. Loti*; examples of the latter, which I sent to Schönherr, were named by that author *Ap. angustatum*; and specimens previously forwarded to Schönherr by Mr. Waterhouse were returned with the same name. I likewise sent specimens to Germar; his note relative to them is as follows: "*Ap. Loti* of Kirby (♂) and *Ap. angustatum* (♀) are no doubt the same species; until the present time I possessed only one injured specimen, presented to me by Mr. Spence; my *Ap. modestum* is identical with *Ap. angustatum*." It is upon Mr. Kirby's authority that I have cited *Ap. glabratum* as a synonym, from the following note in his manuscript book: "*glabratum* of Spence, var. *Apion Loti*, K." This I communicated to Germar in a note under *Ap. Loti*, but he made no observation upon it.

I have found this species rather abundant in Yorkshire, at

Birch Wood, Mickleham, and other places, always upon the *Lotus corniculatus*, in July.

46. *A. afer*, Schönh. (1833).

— *validirostre*, Schönh.

— *puncticolle* (Waterh. MSS.), Steph. Manual (1839).

I possess eight foreign examples of this species, sent to me by Schönherr, Germar and Chevrolat all under the first name; I have closely examined and compared these with a long series of eighty-three specimens of *Ap. puncticolle*, and no doubt exists in my mind that they are identically the same; M. Chevrolat and Mr. Waterhouse agree with me in this opinion. It is an insect that is subject to sexual and individual variation, and the varieties in a long series gradually pass one into another, so that no separation can be made.

According to Germar, *Ap. validirostre* of Schönherr is the male of this species.

I met with a great number of this insect the beginning of July amongst grass on hedge-sides near Turner's Wood, Hampstead.

47. *A. scutellare*, Kirb., Germ., Schönh., Steph.

— *Kirbii* (Leach MSS.), Germ., Steph.

I sent specimens of this insect under the name of *Ap. Kirbii* to Schönherr, who referred them to *Ap. scutellare* of his work. Kirby originally characterized it with the latter name, and I regret that in strict accordance with the law of priority it cannot be changed. The late Dr. Leach placed in the national cabinet (at what period I have no means of determining) three insects under the name of *Ap. Kirbii*, which undoubtedly belong to *Ap. scutellare*. Germar has described* an insect with the name *Ap. Kirbii*, and added this note: "According to the description of *Ap. scutellare*, Mon. 78, we should distinguish this insect as being it, if Dr. Leach had not sent the same as a new species under the above name; but should this have been done through mistake, this description will at least serve as an addition to that of Kirby."

I have found this insect very plentiful on the furze (*Ulex europæus*) near Lyndhurst, and in Windsor Forest in June, and also at Shirley Common in October. On the furze, Ascot Heath, in great abundance in July and August, Mr. S. Stevens.

48. *A. obscurum*, Marsh., Kirb., Steph.

Two examples of this species were found amongst a parcel of insects given to Mr. Marsham by A. B. Lambert, Esq., one of

* Germ. Mag. iii. App. p. 50, 1818.

which is now in the collection of Mr. Kirby, and the other in that of Mr. Stephens ; these are the only specimens known.

49. *A. flavipes*, Fab. (1781), Herbst, Kirb., Gyll., Germ., Steph., Schönh.

Common on the white or Dutch clover (*Trifolium repens*), Mr. Kirby.

50. *A. nigritarse*, Kirb., Germ., Steph., Schönh.

— *Waterhousei*, Schönh.

The typical example of the last-named insect being in the cabinet of Mr. Waterhouse, I have had ample opportunity of examining it ; it is doubtless a female variety of the present species, having the tibiæ obscure testaceous.

Found rather abundantly on *various plants*, which renders its habitat uncertain.

51. *A. assimile*, Kirb., Germ., Gyll., Steph., Schönh.

— (var. *b.*) *flavipes*, Gyll. vol. iii.

Taken occasionally in profusion from April to October in red clover fields, pastures, meadows, and on hedge-banks, frequently in company with the two following species (*Ap. Fagi* and *Ap. Trifolii*).

52. *A. Fagi*, Linn., Kirb.

Curc. Fagi, Mus. Linn.

A. apricans, Herbst, Germ., Gyll., Steph., Schönh.

— *Fagi*, Mus. Kirb.

— *flavifemoratum*, Kirb., not Herbst.

The law of priority requires that the name given by the illustrious naturalist should be restored to this species.

Mr. Kirby has demonstrated* that the original specimens now preserved in the Linnæan museum are "beyond all question" the true *Curc. Fagi* of Linnæus. I have recently rigorously re-examined and compared these specimens with all the yellow-legged Apions that are liable to be confounded with them, and I can now affirm, without the least hesitation or doubt, that they are two immature males of *Ap. apricans* of Herbst : the form of the rostrum being nearly straight ; the pale yellow basal joints of the antennæ, their shallow subremote punctures on the disc of the thorax, the pallid or pale yellow trochanters and femora, distinguish them from all the other allied species.

Ap. Fagi of Kirby is described by him from the above-named Linnæan examples. There is an insect in the Kirbian collection of Apions with the name "*Fagi*" ; it is fastened upon a piece of paper with gum, and compressed to imitate the Linnæan speci-

* Linn. Trans. ix. p. 41.

mens ; this I have many times examined, and always with the same result, which is, that it is an immature male of *Ap. apricans* of Herbst, synonymous with *Ap. flavifemoratum* of Kirby: the latter author therefore appears to have described the same species twice ; but I think the circumstance of Linnæus having given the habitat in "*Fagi foliis*" has had a tendency to bias Mr. Kirby's judgement, in considering it distinct from his *Ap. flavifemoratum*: this (with many other species of the genus that I have examined) has ample wings, and the imago is not always found on the same plant that the larva feeds upon, but sometimes on trees—see notes on *Ap. Craccæ* ; it is therefore very probable that *Ap. Fagi* of Linnæus was found on a beech-tree.

This and the preceding species, from their extreme resemblance to each other, are rather difficult to determine, but a knowledge of their sexual dissimilarities in the form of the rostrum will greatly assist in distinguishing them.

Ap. assimile may be known from *Ap. Fagi* by having the rostrum in both sexes distinctly more curved, and in the male attenuated in front ; whereas the latter species has the rostrum of both sexes filiform, nearly straight, and evidently longest in the female. *Ap. assimile* has the basal joints of the antennæ dull piceous ; the thorax closely punctulated, with the punctures confluent. *Ap. Fagi* has the basal joints of the antennæ testaceous ; the thorax above more convex, with shallow subremote punctures on the disc ; and it is a larger insect than *Ap. assimile*.

I have foreign specimens of *Ap. flavifemoratum* of Herbst from Germar, found in Saxony, which is a very distinct species and not hitherto discovered in this country. I have also foreign examples of *Ap. apricans* of Herbst from Schönherr.

I have frequently taken, in the spring and autumn, this and the preceding species together in profusion in red clover fields (*Trifolium pratense*) near Mickleham, at Birch Wood, and other localities, also in meadows and pastures where that plant grows.

53. *A. Trifolii*, Linn.

Curc. Trifolii, Mus. Linn. (Syst. Nat. iii. App. p. 224).

A. æstivum, Germ., Gyll., Steph., Schönh.

— (♂) *ruficrus*, Germ., Schönh.

— (var. β.) *flavifemoratum*, Kirb.

— (var.) *Leachii*, Steph.

I have the pleasure of reviving and re-establishing, by means of the Linnæan cabinet, the appropriate name of Linnæus to this species.

There is an insect preserved in the Linnæan collection (which it is very remarkable has been overlooked by Marsham and Kirby) that is well secured with gum upon a piece of paper, on which is inscribed "*Trifolii*" by Linnæus's own hand ; the name

being written on the same paper which bears the insect, effectually protects it against every casualty: this evidence is so strong and conclusive, that not a shadow of a doubt can now exist as to its identity. Moreover it agrees with his description in all its natural characters; but the body is covered beneath with whitish mould, which has been noted by the terms "abdomen niveum," when in fact the species has a black, naked body: this error, it is but fair to observe, may well be excused, since, according to Kirby, Linnæus rarely used a lens. *Curc. Trifolii*, described by Marsham (after Linnæus) as having a white abdomen, has long been immolated by Kirby. Schönherr has cited *Ap. Trifolii* of Linnæus as a mere synonym to *Ap. Viciae*, because the latter species has a white abdomen; but Schönherr has injudiciously applied the name to a species with very different characters, namely *Ap. Trifolii* of Lintz. We are informed by Linnæus that his insect inhabits *Trifolium montanum*; in England it is found abundantly upon *Trifolium pratense*. I have many times inspected the type of *Curc. Trifolii* of Linnæus, and have not the slightest doubt of its being a female of *Ap. æstivum*. I sent examples (♂ ♀) of this species to Schönherr, who referred them to *Ap. æstivum* of his work. I likewise sent many specimens to Germar, who has recorded his opinion of them as follows: "*Ap. æstivum*: Kirby's *Ap. assimile* is identical*; the first joint of the antennæ is more or less red, and sometimes also the second;" "but *Ap. assimile* of Gyllenhal is unknown to me." I cannot concur with Dr. Germar that the British *Ap. æstivum* is identical with Kirby's *Ap. assimile*, because I think they are furnished with characters sufficiently evident to entitle them to rank as distinct species; certainly the British *Ap. æstivum* occurs with the basal joints of the antennæ more or less piceous, but they are generally black, except the first joint, which is red at its base. I must here observe, that specimens of *Ap. assimile* of Kirby, which I sent to Schönherr, were identified by him as *Ap. assimile* of Gyllenhal. I also forwarded to Germar examples of the same species.

I received an insect from Schönherr (symbolized ♂) with the name *Ap. ruficrus*, referred by him to his work (v. p. 407. 100, Germania). I wrote to Germar for specimens of *Ap. æstivum*; he sent me an example of "*Ap. ruficrus*, Germ." Schönherr now appears to regard *Ap. ruficrus* as distinct from *Ap. æstivum*, although he has previously cited the former name as a synonym to the latter†; Germar has recorded that "*Ap. ruficrus* may perhaps be only a variety of *Ap. æstivum*‡."

I have very carefully examined the German examples of *Ap. ruficrus*, and have no doubt they are both males of *Ap. Trifolii*,

* Ent. Zeit., Stettin, no. 1. p. 4, 1842.

† Syn. Ins. i. p. 281. no. 70.

‡ Germ. Mag. iii. App. p. 39.

Linn., agreeing with my specimens of the latter in every *important* character; they differ however in having some parts of the legs more intensely coloured; their anterior coxæ and trochanters are totally black, and the four posterior femora more or less piceous and inclining to black. The insect received from Schönherr differs from Germar's in having the intermediate femora testaceous: the German specimens appear to have the colour of the legs inclining to black, the British incline more to rufous.

On examining a great number of this species, it will be found to have a peculiar tendency to vary extremely in the colour of the legs, and it is impossible to enumerate the shades of difference which arise; I shall therefore merely give a general description of the range of varieties. The anterior pair of legs have their coxæ and trochanters testaceous, with the apex of each, and sometimes the base and apex, more or less dusky testaceous, or piceous or black; the trochanters are not unfrequently wholly piceous or black; now and then the coxæ are black at the base and apex, obscure testaceous in front and piceous black behind, clearly indicating a propensity to become entirely black; the anterior tibiæ are frequently piceous, sometimes rufo-testaceous, sometimes black; occasionally the base and the lower half are black, and between the knees and the middle testaceous; the four posterior coxæ, their trochanters, the joints, the tibiæ, and all the tarsi, piceous black or black; all the femora beneath rufous or testaceous, now and then inclining to piceous above.

Ap. Trifolii may be distinguished from *Ap. assimile* and *Ap. Fagi* by having the anterior trochanters pitchy and the four posterior black, whereas the two latter species have all the trochanters constantly rufous*; *Ap. Trifolii* has the rostrum porrect and very little bent, a good character which will also distinguish it from *Ap. assimile*, the latter having the rostrum distinctly curved: these characters, independent of other less striking differences, are sufficient to discriminate this species from its congeners.

I met with this insect in considerable numbers with the two preceding in a field of red clover (*Trifolium pratense*) near Herne Bay in Kent, at the beginning of last June.

* Mr. Kirby has very judiciously introduced into his descriptions the colour of the coxæ and trochanters, and has been followed by Mr. Stephens. It is surprising that Gyllenhal, Germar and Schönherr should have disregarded the colour of these organs as a subsidiary specific character; nevertheless it is a valuable auxiliary, not only in determining species, but also the sexes: for example, the male of *Ap. rufirostre* has all the coxæ and trochanters yellow, the female has all the coxæ black and the trochanters rufous (first noticed by Mr. Spence); the male of *Ap. difforme* has all the trochanters rufous, the female has them deep black; the male of *Ap. flavipes* has the anterior coxæ rufous, in the female they are always black.

54. *A. Schoenherrii* (Waterh. MSS.), Schönh.

Black, glabrous and shining. Head short and broad; the frons posteriorly convex and minutely punctured, between the eyes striated, the striae more or less distinct; rostrum short and stout, attenuated in front and much thickened behind, a little bent, punctulated. Antennae medial, about the length of the rostrum; the articulations short and robust, entirely black, except the first joint, which is red at its base, and sometimes piceous at its apex. Thorax narrow, oblong, subcylindrical, rather broader than the head, *very minutely punctured*, the punctures frequently very faintly impressed and indistinct, with a minute fovea before the base, intersected by a faint short line, sometimes scarcely perceptible. Elytra ovate, above very convex, arched, deeply punctate-striate, the striae minutely punctured, the interstices rather broad, flat, and coriaceous. Legs black, with the anterior coxae and trochanters testaceous, the base and apex of each or only the apex more or less piceous; occasionally the trochanters are entirely piceous; the anterior tibiae testaceous or fuscous, sometimes testaceous in front and piceous behind; the four posterior coxae black, their trochanters piceous; all the femora testaceous, now and then rufous. ♂. (Length $1\frac{1}{4}$ line.)

The female differs in having the head in some examples distinctly narrower; the rostrum longer, slender and filiform; the antennae inserted behind the middle of the rostrum; the legs more strongly coloured, having the anterior coxae, trochanters and tibiae piceous.

This insect in the order of affinity ranks next to *Ap. Trifolii*; the female is very much like the same sex of that species, but distinguished chiefly by having the thorax very minutely punctured.

One male specimen of this new and very distinct species was first found by Mr. Waterhouse, and he has had the pleasure of naming it in honour of one of the most distinguished and celebrated entomologists in Europe; it was described in the work of M. Schönherr by Professor C. H. Boheman from the specimen above-named, and afterwards returned to Mr. Waterhouse; it appears to be unknown on the continent. I found the female near Scarborough in August 1837, since which a few specimens of both sexes were taken in the same month amongst short grass near Arundel by Mr. S. Stevens and myself. It appears to be not only very rare, but extremely local.

55. *A. varipes*, Germ., Gyll., Steph., Schönh.

— *flavifemoratum*, var. γ . Kirb.

— *flavipes*, var. *c.* Gyll. vol. iii.

This species is nearly related to the four preceding, but it may be readily known from them by its having the rostrum longer

and much more curved, especially in the female; the legs longer and distinctly stouter; with the lower half of all the tibiæ black, the upper part rufous.

This insect is rather local and not frequently found; I met with it once rather plentifully in a red clover field near Birch Wood, the beginning of June.

56. *A. levicolle*, Kirb., Germ., Steph., Schönh.

Mr. S. Stevens has found this species common in three localities near Arundel annually, in the month of August; also near Ryde, Isle of Wight. I met with many specimens on a sand-bank on Windmill Hill, Gravesend, in July: it appears to prefer sandy situations.

[To be continued.]

XLIX.—*Further Notice respecting Cyanocitta superciliosa, a supposed new species of Blue Jay.* By H. E. STRICKLAND, M.A.

IN the last Number of the 'Annals,' p. 260, I proposed to separate the *Blue Jays* of America from *Cyanocorax*, under the generic name of *Cyanocitta*, and I also pointed out a species of the latter group which had been hitherto confounded with the *C. ultramarina* of Mexico. When my paper went to press it happened that I had not then received the March Number of Mr. G. R. Gray's excellent work the 'Genera of Birds,' which contains a monographic summary of the subfamily *Garrulinae*. He there follows preceding authors in retaining the *Blue Jays* and the *Blue Crows* under one genus, *Cyanocorax*, of which he enumerates in the whole twenty-one species. There can however be no doubt that these two groups are deserving of generic separation, as they not only differ in many points of structure and of colour, but also in their geographical distribution, *Cyanocorax* proper inhabiting the warm latitudes of South America, while *Cyanocitta* ranges from Mexico to the colder parts of the North American continent. The latter genus may be thus defined:—

Beak moderate, breadth at the base exceeding the height; upper mandible depressed at the base, slightly compressed towards the point; culmen straight for $\frac{4}{5}$ ths of its length, then gradually curving down; commissure almost straight till near the apex, then curving downwards; emargination nearly obsolete, gonyes curved upwards, height of each mandible nearly equal. Nostrils covered by recumbent bristly feathers. Frontal feathers not forming a rigid erect crest as in many species of *Cyanocorax*. Total length from 10 to 12 inches. Plumage more or less blue, especially on the wings and tail, which are frequently barred transversely with black. Structure of the feet, wings and tail as in *Cyanocorax*.